

# NOAA Science On a Sphere 5.1.0+ Release Notes



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## Table of Contents

Release Date	3
Release Highlights	3
Requirements (Please Read!)	3
Product Component Enhancements	3
SOS Bug Fixes and Improvements	4
Fixes for Release 5.1.1	4
Backward Compatibility	5

For detailed information on using SOS features, please refer to the [SOS User Manual](#) (also located at: SOS website > Support tab > Manuals menu > Users Guide menu item).

## Release Date

- **SOS 5.1.1** – Released October 4, 2016
- **SOS 5.1.0** – Released August 25, 2016

## Release Highlights

- Updated SOS to run on the new Ubuntu 16.04 LTS (Linux) operating system. This version of Linux includes 4 years of improvements over Ubuntu 12.04 LTS, which is the underlying system that SOS has been using for the past few years. Ubuntu 12.04 will no longer be updated after April 2017 (including new security patches), so installing this update will need to be a high priority for all SOS sites before then.
- Fully-featured version of the Visual Playlist Editor with many new features and enhancements, including the ability to create a Presentation Playlist.
- Bug fixes and software enhancements across the [SOS Product Suite](#), including the SOS Remote App and the NOAA SOS Public Kiosk.

## Requirements (Please Read!)

- SOS 5.1.0+ requires **Ubuntu 16.04 LTS**.
- **We strongly recommended that you reinstall your backup SOS machine (typically called SOS2) first with Ubuntu 16.04 and SOS 5.1.0+. This process requires a full wiping of the SOS computer's disk, including user home directories, data files, and presentations.** Because this is a major operating system change, you should verify that everything is working well on SOS2 at your site before reinstalling your primary machine (typically called SOS1).
- **Do NOT upgrade your SOS computer to Ubuntu 14.04 LTS, even if prompted. The SOS software will not work with this version of Ubuntu.**
- **A detailed set of directions for the installation of Ubuntu 16.04 and SOS 5.1 are available in the document entitled: [Upgrade Instructions for Ubuntu 12.04 & SOS 5.0 to Ubuntu 16.04 & SOS 5.1](#). Please read that guide thoroughly before you begin!**
- **We are happy to assist you in your SOS 5.1.0+ installation (just email our support team at [sos.gsd@noaa.gov](mailto:sos.gsd@noaa.gov)).**

## Product Component Enhancements

- **iOS Remote App**  
The iOS Remote App has been updated with important fixes and improvements in v5.1.0 (see separate Release Notes). For detailed information on using the SOS Remote app, please refer to the [SOS Remote User Manual](#) (also located at: SOS website > Support tab > Manuals menu > SOS Remote App menu item).
- **NOAA SOS Public Kiosk**  
The NOAA SOS Public Kiosk ("NOAA Kiosk") software was previously updated to v5.1.0 in July 2016 (see separate [Release Notes](#)). The NOAA Kiosk v5.1.1 version includes a few minor updates and does not require a separate installation of the media2kiosk program that prepares the SOS files used on the Kiosk machine. The NOAA Kiosk, including installation, setup, and usage, is described in the

manual [NOAA SOS Public Kiosk](#) (also located at: SOS website > Support tab > Manuals menu > NOAA SOS Public Kiosk menu item).

- **Visual Playlist Editor**

The Preview Edition released with SOS 5.0 has now been expanded to include creating and editing Presentation Playlists in addition to customized Datasets (see separate [Release Notes](#)). It has replaced the previous Playlist Editor on the SOS machine and provides many powerful new functionalities for content creators and presenters, as well as localization/translation of the user interface to non-English languages. The Visual Playlist Editor is described in the manual [SOS Visual Playlist Editor \(PDF\)](#) (also located at: SOS website > Support tab > Manuals menu > Visual Playlist Editor menu item).

## SOS Bug Fixes and Improvements

### INSTALLATION

- Obsolete Bluetooth libraries were removed
- More descriptive icons for software components used on the desktop
- User and machine identification text displayed on the machine desktops
- Extensively reworked build and release automation infrastructure to improve software quality and support
- Modifications of installer code for Ubuntu 16.04

### MAIN SOS PROGRAM

- Optimize dataset loading and display for Ubuntu 16.04

### SOS STREAM GUI

- Changed menu item for Playlist Editor to launch Visual Playlist Editor

### UTILITIES

- Removed obsolete Bluetooth option from Utilities user interface

### TRANSLATIONS

- Rerun translations automatically in crontab after Mon. dataset downloads and catalog updates
- Added extensive logging and error messaging to assist with any troubleshooting of translation conversion and loading issues

### DATA CATALOG

- Fixed some incorrect values in the DateAdded field and filled in DateAdded values for Live Program datasets

## Fixes for Release 5.1.1

- Fix for a bug in a third-party graphics library in Ubuntu 16.04 that caused SOS memory usage to grow over time when playing movies. This would eventually cause SOS to crash.
- Fix for a rare SOS crash that occurred in a dataset when loading a movie PIP
- Accept zfps values that have a decimal point
- Installation-related fixes:
  - Updating permissions on projector files
  - Copying file backups between SOS machines

- Finding the SOS Key
- Error when rerunning the installer

## Backward Compatibility

**For best results, we strongly encourage sites to update all the SOS software components at the same time to version 5.1.0+.** To assist you in planning your SOS software upgrades, we have prepared a new [SOS Product Suite](#) page on the SOS website. Where possible, the individual SOS software components have been updated so that they will continue working with SOS versions 5.0.0 and 4.3.1, with some limitations. Versions older than 4.3.1 will require a full update of all the software to version 5.1.0+.

- iOS Remote App
  - **v5.1.0** should work well with SOS 5.0.0.
  - **v5.1.0** may work with SOS 4.3.1, but has not been extensively tested.
    - There are some incompatibilities in the SOS Data Catalog, for example. Dataset variations (such as Blue Marble with audio) will not show up in the Data Catalog on the iPad. However, they can still be displayed on the sphere if they are already in presentation playlists.
    - The Splitter tool is not supported.
  - **v5.0.0** should work with SOS 5.1.0+, but has not been tested.
  - **v.4.3.1** may work with SOS 5.1.0+, but has not been tested. The following limitations were documented previously when testing iOS Remove App v4.3.1 with SOS 5.0.0:
    - Transferring the Data Catalog from the SOS machine to the iPad may timeout and fail to complete. This would prevent any new updates to the Data Catalog from being loaded onto the iPad.
    - The iPad would still display presentation playlists on the sphere.
- NOAA Kiosk
  - **5.1.0+** should work well with SOS 5.0.0 or SOS 4.3.1
    - You would need to install the updated media2kiosk 5.1 utility for Ubuntu 12.04, which is available separately upon request from NOAA's SOS team.
    - Customizing the Kiosk datasets and groups has not been tested on SOS 4.3.1 and has not been verified to work correctly. However, the default kiosk configuration should work okay.
  - **5.0.0** may work with SOS 5.1.0, but has not been tested.
- Visual Playlist Editor
  - **5.1.0+** requires Ubuntu 16.04 so it is not compatible with SOS 5.0.0 or earlier versions.
  - **5.0.0** (Preview Edition) is replaced in this release and should no longer be used.
- Wii Remote
  - No longer supported in SOS 5.1.0+. The iOS Remote App is now required for presenters to control the SOS software and the general public may use the NOAA Kiosk.